DOCUMENT RESUME

ED 359 568 CS 508 204

AUTHOR Dewis, Robert; Lee, Wen-Shu
TITLE Expanding Persuasion Research: Using More Personally Relevant Issues and Exploring Relevance Perceived from Message Content.
PUB DATE Feb 93
NOTE 44p.; Paper presented at the Annual Meeting of the Western States Communication Association (64th, Albuquerque, NM, February 12-16, 1993).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Communication Research; *Females; *Persuasive Discourse; Research Methodology; Secondary Education; *Secondary School Students; Smoking; Social Cognition
IDENTIFIERS California (North); Health Communication; Issue Salience; *Message Responses; *Public Service Advertising

ABSTRACT

A study explored the impact on junior high school females of "don't smoke" public service announcements (PSAs) created by two groups of high school females. The study extended the research on relevance and persuasion by utilizing intimate issues, and by exploring the potential for increasing message relevance by using persuasive messages created by peer member focus groups. Four female smokers and four female non-smokers were recruited from a northern California suburban public high school. The two groups (working separately) decided on a scenario and a script to be videotaped for their respective PSAs. To measure responses to the PSAs, 217 eighth-grade students from a junior high school completed a questionnaire. Results indicated that: (1) female smokers rated the smokers group PSA to be more relevant and to be of greater perceived effectiveness than the nonsmokers group PSA; (2) female adolescents who have experimented with cigarette smoking did not perceive more relevance in the smokers group PSA than in the PSA created by the nonsmokers; however, (3) females who have experimented with smoking found the smokers group PSA to be significantly more effective than the nonsmokers group PSA. Findings suggest the contributions that can be made by those who are usually on the receiving end of pedagogy should be recognized and affirmed, and that further research is needed to distinguish between issue relevance and message relevance. (Eight tables of data are included; 31 references are attached.) (RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED359568

Expanding Persuasion Research: Using More Personally Relevant Issues and Exploring Relevance Perceived from Message Content

Robert Dewis
Speech Department
De Anza College
Cupertino, CA 95014

Wen-Shu Lee
Department of Communication Studies
San Jose State University
San Jose, CA 95192

Paper presented to the
Western States Communication Association Convention
Albuquerque, NM
February 13-16, 1993

RUNNING HEAD: Relevance: Issues and Messages

CS508204

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Robert Dewis
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Expanding Persuasion Research: Using More Personally Relevant Issues and Exploring Relevance Perceived from Message Content

Perceived message relevance, and the more general construct, involvement, have been studied by communication researchers as important elements in the processing of persuasive messages. While social-judgment involvement theorists (e.g., M. Sherif & Hovland, 1961) posit that perceived involvement inhibits persuasion, elaboration likelihood model researchers (e.g., Petty & Cacioppo, 1979) characterize perceived message relevance as a mediating variable, influencing the way and extent to which recipients process the content of the message, thereby affecting persuasion. In studies done from either perspective, however, typical operationalizations rely on the manipulation of perceived issue involvement to elicit perceived message relevance, generally ignoring the influence message content may have on perceptions of relevance.

Persuasion research investigating relevance as a variable has also been limited by the types of issues typically used in the manipulation of perceived issue relevance, focussing on either institutional policies (e.g., Leippe & Elkin, 1987; Sorrentino, Bobocel, Gitta, Olson, & Hewitt, 1988; Petty & Cacioppo, 1979), purchase choices (e.g., Burnkrant & Unnava, 1989; Homer & Kahle, 1990; Kardes, 1988; Petty, Cacioppo, & Schumann, 1983), or global, moral, and philosophical issues (e.g., Ostrom & Brock, 1968; Sereno, 1968). While these issues may be perceived as having varying degrees of personal relevance, or manipulated to seem so, they are not issues of an intensely personal nature. Issues of greater

personal relevance might be those that ask individuals to make important personal choices that immediately and directly impact their own lives or the lives of ones they love. For example, according to a number of sources (e.g., Fackelmann, 1991; Glynn, 1989; U.S. Public Health Service [U.S. PHS], 1980) cigarette smoking is becoming a greater concern for women in terms of numbers of smokers, resistance to cessation and deterrence efforts, and increases in smoking related diseases and deaths. Given the risk it holds for women, cigarette smoking could be considered an especially personal issue for female smokers, and a useful one for an investigation into the effects of perceived relevance in the processing of, and responses to, persuasive communication.

Finally, the persuasive messages used in research typically are created and produced by the researchers. As a result, the researchers' biases are likely to influence certain characteristics of these messages, such as their focus, reasoning, language, and structure. Even when pretested, such messages may be extremely limited in the extent to which relevance is perceived by an intended audience. The most relevant messages would most likely be ones created by the audience itself. Audience members are the ones who are best able to express what they perceive as important and reasonable for themselves and others like themselves, with language and style that speaks from similarity of lifestyle and experience. To increase the potential for perceived message relevance, the participants whose behavior we are seeking to change should be more involved in the message making. It is common to hear smokers say they wish they had never started. Therefore, they may not only guide the researchers in the making of the messages meant to dissuade others from following the same path; they

should be invited and encouraged to create the actual messages.

In summary, persuasion research has been limited by investigating perceived message relevance as an assumed result of perceived issue relevance, ignoring the influence of message content on perceptions of relevance and the effect those perceptions might have on the process and outcome of persuasion. In addition, persuasion research has generally neglected to use issues of high personal relevance, such as cigarette smoking, that profoundly link an individual's attitudinal and behavioral choices to the personal consequences of those choices. And, finally, messages purported to have differing degrees of relevance have been created by researchers, when the most relevant messages are more likely to be created by those who speak the same language and have the same life perspective as the intended audience.

This study addresses these concerns and oversights through the creation and testing of "don't smoke" messages developed by and for adolescent females. Two messages were created, their purpose being to dissuade junior high school females who are either experimenting with or inclined to start cigarette smoking. One message was created by high school females who currently are cigarette smokers, and the other was created by high school females who have never been cigarette smokers. These messages were then presented to junior high school girls, including current smokers, experimental smokers, and nonsmokers, and their perceptions of message relevance and effectiveness were surveyed.

In addition, to explore the relationship between perceived relevance and perceived effectiveness when relevance is perceived from the content of the

message, rather than manipulated with pre-message instructions, subjects were presented with the two messages without researcher-prefaced characterizations about any differences between them, e.g., message sources.

Women-at-risk For Smoking

While the overall number of smokers has been decreasing, this is less true for women than for men. The Surgeon General concluded that the decline in cigarette consumption in this country is due to higher rates of smoking cessation among men and lower rates of smoking initiation among male adolescents (U.S PHS, 1980). In 1977, as many female adolescents were smoking a half a pack of cigarettes a day as were males, and in 1990, female high school seniors outpaced their male classmates smoking one or more cigarettes per day, with a rate of 19.3% vs. 18.6% ("Tobacco use," 1990).

Cigarette smoking has been linked with increased health risks particular to women, including premature or low-birthweight babies (U.S. Department of Health and Human Services [U.S. DHHS], 1989), cervical cancer (Fackelmann, 1991), tubal pregnancy ("Smoking boosts risks," 1991), and heart failure for those using oral contraceptives (U.S. DHHS,1989). Considering the multiple health risks associated with both cigarette smoking and female reproductive concerns, it is alarming that a survey from the Centers for Disease Control found that one out of every three reproductive-age women is a cigarette smoker ("Federal survey," 1991). In addition, lung cancer has overtaken breast cancer as a more prevalent threat to womens' lives (Baker & Sherman, 1991; Harris, 1984; Stolley, 1983), increasing lung cancer related deaths for women by 300% in the last twenty years (Amos & Chollat-Tarquet, 1990).

The Surgeon General, noting the threat cigarette smoking presents to women, advised early intervention:

> The key to addressing this problem is the prevention of smoking among female adolescents. The disparity in smoking prevalence between men and women is primarily a reflection of differences in smoking initiation. Smoking initiation has declined much more slowly among females than among males. (U.S. DHHS, 1989, p. vi)

In spite of the particular need to address this population, intervention efforts have not demonstrated great success with female adolescent smokers. Some researchers suggest that one reason for this failure is that female adolescent smokers are not the "typical teenage smokers" intervention program developers have in mind when developing their programs.

Gilchrist, Schinke, and Nurius (1989) reported evidence that young women are more resistant than men to smoking intervention programs, and believe this resistance can be attributed to developmental and social differences. Demographic and psychosocial characteristics were compared among 6th-grade girls and boys who were either at high or low risk for future habitual smoking. High risk individuals were described as those who had experimented with cigarette smoking, or had intentions to do so in the near future. High-risk girls demonstrated significantly greater resistance to intervention efforts when compared to high-risk boys, low-risk girls, and low-risk boys. While the differences in intervention effectiveness between high-risk and low-risk students might be expected, and is supported by other research, the differences between high-risk girls and high-risk boys raises questions about the causes for these

differences.

In their study, Gilchrist, Schinke, and Nurius identified psychosocial differences (self-perceptions about their social behavior, self-efficacy, and risk-taking orientation) between high-risk girls and high-risk boys, and between high-risk and low-risk girls. The researchers believe that these psychosocial differences are likely responsible for the greater resistance to intervention found for female adolescent smokers, and argue that current intervention programs, designed to teach social skills (e.g., learning how to say no), ignore distinctive psychosocial differences found in female adolescent smokers. As a result, these programs address concerns that are less relevant for female adolescent smokers than for males. Efforts must be made to investigate ways to present more relevant information, with more relevant communication, that are responsive to the particular needs, concerns, and motivations of female smokers.

Relevance, Involvement, and Persuasion

In the research exploring involvement in the process of persuasion, two theoretical approaches have emerged: one from social judgment-involvement theorists (e.g., M. Sherif & Hovland, 1961), and the other from cognitive response researchers, (e.g., Petty & Cacioppo, 1979, 1984). The term involvement has been used to refer to the extent to which individuals perceive a relationship between an issue or object and themselves. However, the operationalization of involvement and related constructs has varied somewhat by the kind and character of that relationship. In addition to differences in operational definition, involvement has appeared to produce seemingly conflicting effects on attitudes and behavior, with social-judgment theorists arguing that highly involved subjects resist

persuasion, and cognitive response theorists arguing that involvement may, sometimes, enhance persuasion.

Regardless whether relevance increases or decreases persuasion, research done from both perspectives has been limited in three ways: (1) by the issues chosen for the research, (2) by focussing on perceived issue relevance rather than message relevance, and (3) by using researcher-produced messages that may be lacking qualities that could lead to greater perceptions of message relevance.

Issues Used in Relevance Research

Social-judgment research generally uses global issues to operationalize the involvement construct, seeking responses to moral, social, political, and philosophical matters, (e.g., birth control, the morality of the Vietnam war, government economic policy). The issues raised in cognitive response research, on the other hand, have been more specific, either asking subjects to respond to arguments for or against institutional policies that may affect their present college life (e.g., tuition raises, compulsory exams, coed dorms), or asking subjects to indicate their behavioral intention to buy or not buy a product (e.g., shampoo, disposable razors). Both research perspectives have used issues that may be perceived as important or relevant by the audience (typically, college students), but have focused either on actions to be carried out by the society or institution, or on a relatively inconsequential, one-time behavioral decision such as intention to purchase a product. What is missing from these studies is an exploration of issues that address the subjects' own current and ongoing attitudes and behaviors that more profoundly and more directly impact their own

physical and/or psychological health, as well as that of significant others.

It would be more useful and meaningful for researchers to investigate the effects of involvement by asking subjects to change attitudes about their own behaviors, or to change the behaviors themselves, when it is within their personal capacity to do so, rather than asking them to change their attitudes about global or institutional issues, or simply to make purchasing choices. Issues of greater personal consequence, requiring more personal and tangible responses from subjects, might be defined as "intimate" issues; these issues could result in more intense perceptions of personal relevance, perhaps better referred to as "intimate relevance." This application of intimate issues in persuasion research would enhance the potency of the involvement construct by focusing on matters that depend directly on the attitudinal and behavioral responses of the message recipient.

An area of research that does address intimate issues is that of health communication, but the study of involvement as a variable is not usually done. This is probably because it is assumed that, by virtue of their membership in the intended audience, the subjects are necessarily "involved." But involvement with the issue is one variable, and involvement with the message should be considered another. Although subjects may be intimately involved with the issue, how a subject perceives the relevance of the persuasive message is likely to have equal, if not more, impact on how the subject responds to the message. Assuming that subjects will care about and feel involved with the message because of their involvement with the issue overlooks the perceived relevance of the message itself as an influence in attitude formation and behavioral intentions.

Operationalization and Manipulation of Relevance: Group Membership and Pre-message Relevance vs. Message-content Relevance

In studies exploring involvement and persuasion, efforts to create varying levels of involvement have been attempted, primarily, by manipulating perceptions of issue relevance. One method manipulates the importance of the issue by presenting groups with two different issues chosen by the researchers; one that is presumably more relevant, and one that is presumably less relevant for the subjects (e.g., appropriate male- and female-related career choices vs. a new comedian's odds for success on television, C. W. Sherif, Kelly, Rodgers, Sarup, & Tittler, 1973). Another method presents the same issue in the same way to two different groups who, as determined by group membership and/or by pretest, attribute either great or little importance to the issue (e.g., desirability of unmarried women using contraceptive pills, Sereno, 1968). A third method, used extensively by the cognitive response researchers, creates two different prefaces for the same message; one introduction to the message states that the issue being discussed will affect the subjects quite soon, and the other states that the issue is being considered by another population entirely, not affecting the subjects in any way (e.g., requiring comprehensive exams for seniors, Leippe & Elkin, 1987; co-ed dorms, Petty & Cacioppo, 1979).

Each of these methods, though useful to a point, has shortcomings. The first, presenting two different issues, cannot measure how different levels of involvement affect the responses of subjects in a single population to persuasive messages about one issue. The second, using two different groups, presupposes consistently polar and predictable responses from the members of each group

regarding the issue under consideration. The third method, prefacing the same message with two different qualifiers, presumes that perceived message relevance is increased by manipulating the perceived issue relevance, and asks subjects to judge, a priori, that the message is one that should or should not concern them.

All of these methods used to manipulate involvement attempt to define or influence the receiver's relationship with the issue before the message has been transmitted, and each makes assumptions about the motivational state and biases that result from that relationship. These methods do not consider the receiver's response to the message itself; that is, whether the subjects perceive the message as personally relevant based on the content of the message.

It would seem worthwhile to elicit responses to the message itself, including subjects' evaluation of its relevance, for this may provide more insight to how individuals use the content and context of the message to help determine how and what to do with it. With that purpose, this study takes the position that message relevance refers to the perceived relevance subjects indicate as a response to the content of the message itself; it does not refer to subjects' perceived relevance of the issue, nor to any possible transfer of perceived relevance from issue to message, nor to relevance perceived due to directives given by the researcher.

Message Relevance: Message Content and Message Development

Message Content. Beyond the overt purpose of a persuasive message, there are features of the message content that may influence perceptions about message relevance. Among these are the particular pros and cons surrounding

an issue that are raised in the message, addressing areas of concern that may or may not be perceived as relevant by some individuals. Additionally, the words, syntax, language style, and perspectives taken may provide clues about the character of the message source; and that source, as well as the source's experience and opinion, may not be considered relevant by some individuals. Cigarette smokers, for example, are likely to feel involved with the issue in a message intended to discourage smoking, yet believe that the concerns raised, points covered, or conclusions drawn in the message are, for them, personally irrelevant. Likewise, the language and syntax of a message may suggest a source with whom the smoker feels no rapport, or with whose perspective on the issue the smoker feels at odds. These two aspects of message content, argument quality and implications about the source based on language and perspective, seem likely to influence perceptions of message relevance, and need to be considered when investigating the relevance of persuasive messages.

Relevance and Argument Quality. Elaboration likelihood model researchers have explored the impact of the elements of messages by manipulating the quality of the arguments used in a message (e.g., Petty & Cacioppo, 1984). However, operationalization of these variables has been limited somewhat by the researchers' assumptions about what makes an argument "strong" or "weak." Petty and Cacioppo state that, if recipients are motivated to process the content of a persuasive message, the "arguments" are what recipients evaluate to determine the merits of the position recommended. A complication arises, however, because individuals have differing beliefs about what information is central to the issue under consideration. Petty and Cacioppo

state that "the kind of information that is relevant to evaluating the central merits of a product or issue may vary from situation to situation and from person to person" (1986, p. 17).

An example of how different people attribute importance to different information is found in the advertising study by Snyder and DeBono (1985) where subjects were asked to respond either to ads containing information about the quality of a coffee product ("A delicious blend of three great flavors"), or to those with implied affective product associations ("a cozy evening"). Those subjects that were measured as "high self-monitors" were more likely to choose the coffee if presented with the "affective" ad, while "low self-monitors" expressed more interest when presented with statements about the quality of the product. If asked, it is likely that each group would report that they responded to what they believed was information that was important and central to an evaluation of the product. Petty and Cacioppo argue that "arguments" refers to any information contained in a message that permits a person to evaluate the message target (e.g., issue, object, person) along whatever target dimensions are central for that person" (Petty & Cacioppo, 1986, p. 18). They further state that either affective or cognitive considerations can be considered, by a recipient, to be of importance when evaluating the merits of the position in the persuasive message. However, having said that, these researchers and others in the cognitive response perspective tend to develop and use arguments that range from "strong" to "weak" on a rational or cognitive continuum.

In developing strong and weak arguments, Petty and Cacioppo use an elaborate process starting with the generation of a large number of arguments

favoring a position that they intuitively believe to vary in strength. These arguments are rated for strength by members of the subject population, resulting in one strong and one weak argument. These arguments are then given to other members of the subject population who are instructed to list thoughts that are elicited by the arguments; those that produce predominantly favorable thoughts are considered to be "strong" arguments, while those that produce predominantly unfavorable thoughts are considered to be "weak" arguments (Petty and Cacioppo, 1986). One difficulty with this process is that, while the strong arguments may be perceived that way by most of the population, a segment of the population that may be important to reach may be more influenced by so-called weak arguments. An example from Petty and Cacioppo will help to illustrate this point.

Petty and Cacioppo (1986) present examples of strong and weak arguments for raising tuition at a university. A strong argument for raising tuition, they say, would be that the university can buy more books for the library, while a weak argument for raising tuition would be that the university can plant more shrubs and trees on the campus. However, granting that the overall population may accept the book buying rationale as a stronger argument than the tree planting rationale, some students (e.g., environmentally conscious students), may perceive the tree planting rationale as the stronger argument. This is not to suggest that the process used by Petty and Cacioppo does not work; it only argues how important it is to consider the specific interests and concerns of a particular intended audience when evaluating which arguments are strong and which are weak. As stated by Petty and Cacioppo (1986), "people will invariably differ in the

kinds of information they feel are central to the merits of any position" (p. 16).

Another weakness with this method for developing different persuasive messages is that it limits the creation of strong and weak arguments to the extremes that have been defined by the researchers. It is possible that the rationale for attitudes and behaviors of some sub-set of the population may be considered weak, and even irrational to the researchers, and even to most people. But a tendency to consider only "rational" arguments is likely to limit the possibilities when majority opinion determines what arguments are strong arguments.

In addition, while researchers pretest their messages to measure relative argument strength, subjects may perceive argument quality in other features conveyed in a message. One such feature that is likely to influence perceptions of credible argumentation is the perception of a credible source.

Relevance and Source Credibility. Credibility is often associated with expertise, but credibility can also be attributed equally to message sources who have much in common with a message recipient. Evidence suggests that perceived source similarity will encourage persuasion (McGuire, 1969). If the similarity perceived is based on common experience, and this common experience is relevant to the issue, subjects will attribute greater credibility to the source, increasing persuasion (Berscheid, 1966). In fact, subjects may attribute more credibility to similar sources than to expert sources (Brock, 1965). Brock found that customers were persuaded more about which brand of paint to use when dealing with sales people having similar kinds of paint experience than with sales people who had much more painting experience.

Perhaps one reason we rely on non-expert but similar sources is that attitudes depend not only on our beliefs, but also on our values regarding an issue. Haas (1981) points out that experts may influence our beliefs about an issue, but peers influence our evaluations of the beliefs. When an attitude about an issue is highly dependent on the values we associate with an issue, we are more likely to attribute credibility to a source that shares our interests, perspectives, goals, and behaviors, than to a source who is scholarly about the issue (Haas, 1981).

Although the impact of source credibility on persuasion has been studied, the variable is usually manipulated by providing the subjects with information about the source's background that purports to indicate a certain level of expertise on an issue. No work has explored how recipients respond to similarities between the source and recipient that might be inferred from the message itself. It would seem likely that, without revealing specific information about the message source, features of the message such as the particular concerns raised, arguments made, and language used might serve as cues about the commonality of experience between the recipients and the source. If this were to occur, perceived similarities may influence perceptions of credibility, influencing perceptions of message relevance as well.

Developing Relevant Messages: Media Campaigns/Intervention Programs. The whole message, meaning the unstated as well as stated message, has been of particular interest to researchers in the areas of advertising and public health media campaigns. Intervention programs could learn from this area of research because, like advertising and media campaigns, these programs

are planned and structured communication events intended for a mass audience. Atkin and Friemuth (1989), in an article on advertising and public health campaigns, discuss one method used to enhance relevance in the language and style of persuasive messages.

Producers of advertising campaigns have used focus-groups, groups of individuals who have interest in, knowledge of, and/or experience with a type of product, to help them produce more relevant and effective messages. Typically, a small group will meet with a moderator who encourages a dialogue among participants for the purpose of eliciting their ideas and concerns about a product or issue. From this discussion, the producers identify consumers' concerns, as well as particular language and style characteristics, to help them in the creation of media messages.

Atkin and Friemuth state that this method has been used primarily by product advertisers, but has not been utilized enough by producers of public health campaigns. Instead, producers of health campaigns have typically developed their messages without input from intended audience representatives. Inviting members of the affected population to discuss their beliefs and concerns surrounding a health issue would be of immense value in the creation of messages intended to help influence that same population.

In the case of cigarette smoking, adolescent female smokers could provide, in a focus group setting, ideas that would be most relevant to other members of this high risk group, and do so in language that could increase perceptions of relevance of the message. But even these ideas and language might be altered if filtered through a researcher on the way to becoming a finished message.

Therefore, as an extension of the focus group concept, the representatives of the intended audience who form the focus group should not only contribute to a discussion about the planned message, but become involved in the actual creation of the persuasive message itself. In this way, it is more likely that the ideas, concerns, language, and style of the message will be perceived as truly relevant, in many respects, by the intended audience: the female adolescent smoker.

Summary and Research Questions

Efforts to intervene with the experimentation and initiation of women smoking cigarettes have not been very successful. Research has shown the important role played by perceptions of relevance when receivers are deciding if and how to process a persuasive message. The ineffectiveness of intervention programs for female smokers may be due to motivational and psychosocial differences; differences that have not been considered or addressed in these programs, the result being that the program messages are perceived as irrelevant by both female smokers and female adolescents who are inclined to become smokers. Therefore, research needs to explore ways to make these "don't smoke" messages more relevant for female smokers.

As discussed earlier, message relevance could be increased by recognizing and addressing in the message the particular motivations, needs, interests, and concerns of the particular audience one is trying to reach. Furthermore, the relevance of the message depends not only on the relevance of the issue, but on the perceived relevance of the message itself, including elements of the message such as the ideas raised, the arguments made, the reasoning used, the words chosen, and the style presented, as well as message cues that may imply

information about the source. Persuasive messages made by researchers run the risk of being perceived as irrelevant due to biases that may influence any of the above listed elements. The most relevant messages that address the particular concerns of a group, raising issues that are important to that group, in language and style familiar to that group, and generally represent the perspective of members of that group are likely to be made by members of that group. Therefore, relevance is likely to be increased by enlisting members of the intended audience itself in the actual creation of persuasive messages.

As well as trying to explore particular ways to improve smoking intervention programs, this study hopes to extend the research on relevance and persuasion in three ways: (1) by utilizing intimate issues in the research; intimate issues being those that ask subjects to make attitudinal and behavioral choices that have immediate, proximal, and consequential impact on their own lives, (2) by investigating perceived relevance that results from the content of a message, as opposed to relevance assumed from group membership, pre-test measures, or qualifying statements made by experimenters, and (3) by exploring the potential for increasing message relevance by using persuasive messages actually created by peer member focus groups.

To these ends, a group of female adolescent smokers created a "don't smoke" persuasive message for slightly younger females who have either just begun or indicated an inclination to engage in cigarette smoking. In order to compare the communication of those who are experienced with those who are not, a group of female adolescents who have never smoked regularly also created a "don't smoke" message for the same audience.

Both messages were presented to junior high school girls to measure their responses in terms of perceived relevance and perceived effectiveness. The audience members were also measured in terms of their experience with cigarette smoking, as well as their current status as smoker or nonsmoker.

This study has taken the position that those with direct experience with a particular behavior are more likely to create more relevant messages for those who are inclined to become involved with that behavior. In addition, this study explores the relationship between perceived relevance and perceived effectiveness. Therefore, the following research questions were explored:

RQ 1: a. Will female cigarette smokers perceive the Smokers Group PSA as more relevant than the Nonsmokers Group PSA?

b. Will female cigarette smokers perceive the Smokers Group PSA as more effective than the Nonsmokers Group PSA?

RQ 2: a. Will females who have tried cigarette smoking perceive the Smokers Group PSA as more relevant than the Nonsmokers Group PSA?

b. Will females who have tried cigarette smoking perceive the Smokers Group PSA as more effective than the Nonsmokers Group PSA?

Method

Phase 1 of this project was to create a "don't smoke" message in the form of a videotaped public service announcement (PSA), produced by adolescent female smokers for other adolescent females who either have become smokers or have indicated an inclination to become smokers. To investigate the specific

influence similar experience would have on perceived relevance, two PSAs would be produced; one by each of two groups that were similar in aspects except in their smoking experience. To this end, one PSA would be produced by high school female smokers, and another PSA would be produced by high school female nonsmokers. It was decided to use high school smokers to produce these PSAs because they are still close enough in age to those individuals who have begun to experiment with cigarette smoking (e.g., young adolescents), but old enough to have some personal knowledge about how cigarette smoking has affected their lives.

Phase 2 involved measuring the perceived relevance and effectiveness of the PSAs by the intended audience: female adolescent smokers and experimenters. Since early adolescence has been identified as the time when individuals are most inclined to experiment with and initiate cigarette smoking, it was decided to present these two PSAs to junior high school female adolescents, and to measure their responses to the PSAs through a questionnaire.

Four female smokers were recruited from a Northern California suburban public high school. The students were told that the researcher believed that they, as adolescent female smokers, had the potential to create very effective messages to discourage younger girls from starting to smoke and, if they would like to participate in this project, he would help them create "don't smoke" PSAs intended for junior high school girls. They indicated that they did not want to <u>tell</u> anyone else what to do, but that they would like to <u>discourage</u> others from becoming smokers as they had.

At the same high school where the smokers were recruited, four non-smoking female students were recruited to participate. These students were told about the project in the same manner as the smokers, except that they were told that the researcher believed that they, as adolescent females, had the potential to create very effective "don't smoke" messages for junior high school girls.

Meeting with the researcher in separate groups, the smokers (Smokers Group) and the nonsmokers (Nonsmokers Group) were reminded that their goal was to create "don't smoke" PSAs directed at junior high school girls, both to deter non-smokers from starting, and to encourage current smokers to quit (PSAs were defined for the students, and examples, such as "buckle up" and "don't drive drunk" PSAs, were discussed). All of the Smokers Group were seniors, and all were age 17. The Nonsmokers Group was composed of three sophomores, two age 16 and one age 15, and one junior, age 16.

During preliminary discussions, all participants indicated to the researcher their willingness to help dissuade younger girls from smoking cigarettes. The Nonsmokers Group members expressed a clear dislike for the behavior and a strong interest in deterring others from smoking. The Smokers Group members expressed some frustration that they had become addicted to a behavior they believed was harmful, and interest in trying to prevent others from becoming similarly addicted.

Focus Group Meetings

The researcher facilitated five focus group discussion sessions with each group, separately, during a period of three weeks. During the discussion

sessions, members of each group expressed thoughts about why some junior high girls started smoking, as well as a number of different ideas about what message content and structure they wanted for their PSAs. By the fifth session, each group had decided on a scenario and script to be videotaped for their respective PSAs.

Producing and Editing the PSAs

The researcher videotaped the scenes under the supervision of the members of each group. The Smokers Group PSA showed a discussion by the smokers sitting around a picnic table, focussing on the things they didn't like about being cigarette smokers, including confrontations with parents, attributions made by other students that they are drug users, and despondent feelings about having developed an addiction to cigarettes.

The Nonsmokers Group PSA presented images of a car exhaust pipe billowing smoke, intercut with scenes of a girl smoking a cigarette. After a couple of switches back and forth between the two scenes, the smoker made a short plea to the camera for the citizens to do something about air pollution. This plea was followed by words on the screen that said, "Why pollute the earth?" These words disappeared and were followed by words that said, "Why pollute your health?" These words then disappeared and were followed by the words, "Why smoke?" These video graphics were produced in a television studio and added to the PSA per instruction of the Nonsmokers Group members.

After completing the videotaping for both groups' PSAs, the researcher edited the shots with instructions supplied by the group members. Each group was then shown the edited results for their approval. The length of the Smokers

Group PSA was 60 seconds, and the length of the Nonsmokers Group PSA was 30 seconds.

Questionnaire Construction

A questionnaire was constructed to elicit responses from junior high school students to the Smokers Group and Nonsmokers Group PSAs. Versions of the questionnaire were presented to the members of the PSA production groups for their comments on the wording and their understanding of the statements. Some suggestions were made, and were incorporated into the final questionnaire. These individuals stated that they believed the questions, statements, and format were clear, and that, importantly, the multiple items for any one concept would probably elicit the same, or similar, responses.

Questionnaire Items

The questionnaire items were designed to collect demographic information about the viewers of the PSAs, data regarding their cigarette smoking experience and status and their responses to the PSAs regarding perceived personal relevance and perceived effectiveness of the messages.

Cigarette smoking experience. The subjects were asked questions regarding cigarettes and smoking, including whether they had ever tried smoking cigarettes (smoking experience), and whether they smoke cigarettes now (smoking status).

Perceived relevance variable. Subjects were asked to respond to three items measuring their perceived relevance for each PSA. Each item was followed by a seven-point Likert-type scale ranging from "strongly agree" to "strongly disagree." (Actual items may be found in Table 1.)

Perceived effectiveness variable. Subjects were asked to respond to six items measuring their perceived effectiveness for each PSA. Each item was followed by a seven-point Likert-type scale ranging from "strongly agree" to "strongly disagree." (Actual items may be found in Table 1.)

Procedure

Student respondents were recruited from Social Science classes in a Northern California suburban junior high school. The students were told that the researcher would like their help in evaluating two "don't smoke" PSAs that were created by high school students. A brief discussion was held to ensure that the subjects understood what a PSA was, and the questionnaires were handed out.

The subjects first were directed to complete the demographic and smoking experience sections of the questionnaire only. They were then told that they would be shown two PSAs. After watching PSA #1, they were asked to respond to the statements in the questionnaire about this PSA. Subjects were given about five minutes to record their responses, and then shown PSA #2. They were then asked to respond to the statements about PSA #2. The first PSA shown during any session was called "PSA #1" and the second PSA was called "PSA #2." The order in which the PSAs were shown was alternated to reduce primacy and/or recency effects. After data entry, recoding was done to rectify the alternate showings of the two PSAs.

Analysis

The data were analyzed using a SPSS/PC+ program (Norussis, 1988). First, the responses to the PSAs from subjects shown the Nonsmokers Group

PSA as PSA #1 and the Smokers Group PSA as PSA #2 were recoded to be consistent with those from subjects who were shown the Smokers Group PSA as PSA #1 and the Nonsmokers Group PSA as PSA #2. Second, factor analyses, employing principal component analysis were conducted on the items requesting responses to the Smokers Group PSA, and on the items requesting responses to the Nonsmokers Group PSA. Third, reliabilities of the individual factors were tested. Fourth, composite scores were formed for the individual factors. Fifth, statistical analyses were conducted to examine the research questions.

Specifically, the statistical analyses included dependent t-tests conducted to determine if there were significant differences between mean scores on perceived relevance and/or between mean scores on perceived effectiveness of the two PSAs for female smokers, and the same was done for females who have experimented with cigarette smoking.

Subjects

To measure responses to the two PSAs, 217 eighth-grade students from the junior high school which is the primary feeder school for the Phase 1 High School were shown the PSAs and asked to complete the questionnaire. Those questionnaires on which subjects did not respond to the question about their smoking experience or smoking status were deleted from the data file, resulting in 206 cases remaining for data analysis. The mean age was 13.75. There were 103 (50%) females and 103 (50%) males. Regarding smoking experience, 77 (37.4%) students indicated that they had tried cigarette smoking, among whom 47 (61.03%) were female and 30 (38.96%) were males, while 129 (62.9%) indicated they had not (56 females, 73 males). Regarding current smoking status, 4.9% (n=10) of

the students indicated they currently were smokers (10 Females, 0 males), and 95.1% (n=196) indicated they were not (93 Females, 103 Males).

Principal Component Analyses

To determine if scores from items believed to be associated with the perceived relevance and perceived effectiveness variables could be combined to form a composite score for each variable, a principal component analysis was conducted on the three items related to the viewers' perceptions of relevance, and the six items related to the viewers' perceived effectiveness for the Smokers Group PSA (see Table 1). Two factors emerged that accounted for 62.6% of the variance (see Table 2). To get a more parsimonious factor structure, a varimax rotation was performed. Items correlated higher than .40 with a factor were considered to be associated with that factor (see Table 3).

Table 1

Perceived Relevance and Effectiveness of Smokers Group PSA Items

SPPR1	PSA #1 raised some issues about cigarette smoking that are important to me.
SPPR2	I can relate to the issues raised in PSA #1.
SPPR3	PSA #1 brought out issues that concern me.
SPEF1	PSA #1 will encourage students not to start smoking.
SPEF2	PSA #1 will encourage nonsmokers to remain nonsmokers.
SPEF3	If I did smoke, even a little, PSA #1 would encourage me to stop.
SPEF4	If I didn't smoke, PSA #1 would encourage me not to start.
SPEF5	PSA #1 will get smokers to think about quitting.
SPEF6	After watching PSA #1, smokers may think twice before smoking their next cigarette.

SPPR = Perceived relevance; SPEF = perceived effectiveness

Table 2

Factor Analysis of Perceived Relevance and Effectiveness of Smokers Group PSA Items

Variable	Communality	*	Factor	Eigenvalue	Pct of Var	Cum Pct
		*				
SPPR1	.57860	*	1	4.53715	50.4	50.4
SPPR2	.65661	*	2	1.09617	12.2	62.6
SPPR3	.68048	*				
SPEF1	.61662	*				
SPEF2	.52313	*				
SPEF3	.70094	*				
SPEF4	.64753	*				
SPEF5	.71449	*				
SPEF6	.51490	*				

Table 3

Rotated Factor Matrix of Perceived Relevance and Effectiveness of Smokers Group PSA Items

	Factor 1	Factor 2
SPPR1	.45385	.61042
SPPR2	.13512	.79837
SPPR3	.17972	.80510
SPEF1	.73575	.27438
SPEF2	.71722	.09349
SPEF3	.80165	.24145
SPEF4	.78214	.18918
SPEF5	.82190	.19742
SPEF6	.65747	.28747

The first factor (50.4% of the variance,) composed of items SPEF1, SPEF2, SPEF3, SPEF4, SPEF5, and SPEF6, dealt with the viewers' perceived effectiveness of the Smokers Group PSA, and was labeled Smokers PSA Perceived Effectiveness. The second factor (12.2% of the variance) was composed of items SPPR1, SPPR2, and SPPR3, intended to measure the viewers' perception of

relevance for Smokers Group PSA, and was, therefore, labeled Smokers PSA Perceived Relevance. Although there was double loading on one item, SPPR1, it was loaded more highly with the Smokers Group PSA Perceived Relevance Factor and so assumed to be associated with that factor.

To determine if scores from items believed to be associated with the perceived relevance and perceived effectiveness variables could be combined to form a composite score for each variable, a principal component analysis was conducted on the three items intended to measure the viewers' perceptions of relevance, and the six items intended to measure the viewers' perceived effectiveness for the Nonsmokers Group PSA (see Table 4). Two factors emerged that accounted for 60.5% of the variance (see Table 5). To get a more parsimonious factor structure, a varimax rotation was performed. Items correlated higher than .40 with a factor were considered to be associated with that factor (see Table 6).

Table 4

Perceived Relevance and Effectiveness of Nonsmokers Group PSA Items

NPPR1	PSA #2 raised some issues about cigarette smoking that are important to me.
NPPR2	I can relate to the issues raised in PSA #2.
NPPR3	PSA #2 brought out issues that concern me.
NPEF1	PSA # will encourage students not to start smoking.
NPEF2	PSA #2 will encourage nonsmokers to remain nonsmokers.
NPEF3	If I did smoke, even a little, PSA #2 would encourage me to stop.
NPEF4	If I didn't smoke, PSA #2 would encourage me not to start.
NPEF5	PSA #2 will get smokers to think about quitting.
NPEF6	After watching PSA #2, smokers may think twice before smoking their next cigarette.

NPPR = perceived relevance; NPEF = perceived effectiveness

Table 5

Factor Analysis of Perceived Relevance and Effectiveness of Nonsmokers Group PSA Items

Variable	Communality	*	Factor	Eigenvalue	Pct of Var	Cum Pct
		*				
NPPR1	.61919	*	1	4.17698	46.4	46.4
NPPR2	.59376	*	2	1.26934	14.1	60.5
NPPR3	.58924	*				
NPEF1	.61056	*				
NPEF2	.63048	*				
NPEF3	.65051	*				
NPEF4	.64953	*				
NPEF5	.58379	*				
NPEF6	.51925	*				

Table 6

Rotated Factor Matrix of Perceived Relevance and Effectiveness of Nonsmokers Group PSA Items

	Factor 1	Factor 2
NPPR1	.28820	.73221
NPPR2	–.05481	.76861
NPPR3	.27956	.71490
NPEF1	.75896	.18585
NPEF2	.79352	.02844
NPEF3	.69940	.40169
NPEF4	.80446	.04871
NPEF5	.59710	.47672
NPEF6	.64705	.31713

The first factor (46.4% of the variance,) composed of items NPEF1, NPEF2, NPEF3, NPEF4, NPEF5, and NPEF6, dealt with the viewers' perceived effectiveness of the Nonsmokers Group PSA, and was labeled Nonsmokers PSA Perceived Effectiveness. The second factor (12.2% of the variance) was composed

of items NPPR1, NPPR2, and NPPR3, items intended to measure the viewers' perception of relevance for Nonsmokers Group PSA, and was labeled Nonsmokers PSA Perceived Relevance. Although two items, NPEF3 and NPEF5, were double loaded, they were more highly associated with the Nonsmokers Group PSA Perceived Effectiveness factor, and so assumed to be items related to that factor.

Reliabilities

The reliabilities of the Smokers Group PSA items measuring perceived relevance and perceived effectiveness were also tested. Reliability for the three Smokers Group PSA perceived relevance items was acceptable (alpha=.68), as was the reliability for the six Smokers Group PSA perceived effectiveness items (alpha=.88). The reliabilities of the Nonsmokers Group PSA items measuring perceived relevance and perceived effectiveness were computed. Reliability for the three Nonsmokers Group PSA perceived relevance items was considered acceptable (alpha=.67), as was the reliability for the five Nonsmokers Group PSA perceived effectiveness items (alpha=.86).

Composite Variables

Because of the emergence of factors from items measuring perceived relevance and perceived effectiveness for the Smokers Group PSA, and perceived relevance and perceived effectiveness for the Nonsmokers Group PSA, and the acceptable levels of reliabilities, composite scores were computed for each. Perceived relevance scores and perceived effectiveness scores for the Smokers Group PSA were computed and labeled SPRELE and SPEFFECT, respectively. Perceived relevance scores and perceived effectiveness scores for the

Nonsmokers Group PSA were computed and labeled NPRELE and NPEFFECT, respectively.

Findings

Significance of Mean Differences for Select Groups

To explore Research Questions 1 and 2, dependent t-tests were conducted with the selected groups "female cigarette smokers" (n=10) and "females who have tried smoking" (n=47) to determine if the means for perceived relevance and/or perceived effectiveness of the two PSAs were significantly different. "Female cigarette smokers" includes those subjects who indicated on the questionnaire that they currently smoke cigarettes, and "females who have tried smoking" was comprised of those females who indicated that they have experimented with cigarette smoking, including those who currently smoke. The results are presented in Tables 7 and 8.

Table 7

Paired t-tests, Perceived Relevance of Smokers Group and Nonsmokers Group PSAs

	SPRELE Mean	NPRELE Mean	Difference Mean	SD	t-value	df	1-tail prob.
Females who tried smoking	13.5652	13.1957	.3696	5.551	.45	45	.327
Female cigarette smokers	15.1111	10.5556	4.5556	8.368	1.63	8	.07

SPRELE = perceived relevance of Smokers Group PSA
NPRELE = perceived relevance of Nonsmokers Group PSA

Table 8

Paired t-tests, Perceived Effectiveness of Smokers Group and Nonsmokers Group PSAs

	SPEFFECT Mean	NPEFFECT Mean	Difference Mean	SD	t-value	df	1-tail prob.
Females who tried smoking	28.6957	24.5435	4.1522	9.787	2.88	45	.003
Female cigarette smokers	26.6000	21.2000	5.4000	15.357	1.11	9	.15

SPEFFECT = perceived effectiveness of Smokers Group PSA
NPEFFECT = perceived effectiveness of Nonsmokers Group PSA

Regarding perceived relevance, there was no significant difference between the two PSAs for females who have tried cigarette smoking. For females who currently smoke cigarettes, the mean for perceived relevance of the Smokers Group PSA was greater than that of the Nonsmokers Group PSA (15.1111 vs. 10.5556), but this difference only approached significance at the .05 level (p =.07).

Regarding perceived effectiveness, there was a significant difference between the two PSAs for females who have tried smoking. The females who have tried cigarette smoking perceived the Smokers Group PSA as more effective than the Nonsmokers Group PSA (28.6957 vs. 24.5435, p = .003). There was no significant difference in perceived effectiveness of the two PSAs for females who currently smoke cigarettes.

Discussion

Research Question 1

Research Question 1a asked if female adolescents who currently smoke cigarettes might perceive a "don't smoke" message created by female adolescents

who smoke as more relevant than one created by female adolescents who don't smoke. The results show that female smokers rated the Smokers Group PSA more relevant than the Nonsmokers Group PSA, but this difference only approached significance (15.1111 vs. 10.5556, $p = .07$). Although the results are not robust, they suggest a difference that should be explored further, ideally with a greater number of female adolescent smokers than the number participating in this study ($n = 10$).

Research Question 1b asked if female adolescents who currently smoke cigarettes might perceive a "don't smoke" message created by female adolescents who smoke as more effective than one created by female adolescents who don't smoke. Although the female adolescent smokers indicated greater perceived effectiveness for the Smokers Group PSA than for the Nonsmokers Group PSA (26.6 vs. 21.2), the difference failed to reach significance ($p = .15$). As in the perceived relevance finding for this group of subjects, though shy of significance, the finding in the expected direction is encouraging and supports the need for more research in this area, hopefully with a larger pool of subjects.

The mixed findings relative to Research Question 1, that the relevance items approached significance and the effectiveness items did not, raises concerns that warrant consideration. One concern stems from the fact that this study used perceived effectiveness rather than actual effectiveness as a dependent variable. While the relevance items required subjects simply to indicate to what extent they personally relate to the content of the messages, the perceived effectiveness items asked subjects to make predictions about the potential effectiveness of a message. One possible explanation for the mixed

results is that the female adolescent smoker respondents may be eager and able to express how they feel about the content of "don't smoke" messages, but more reluctant to predict and compare the potential effectiveness of these messages. If so, it may help explain why they responded to the two PSAs somewhat differently on subjective items, e.g., items that dealt with personal relevance, but not so differently on the more objective items, e.g., items regarding perceived effectiveness.

The limited nature of this study required that perceived effectiveness be used as a variable rather than actual effectiveness. A more encompassing study might be one that would attempt to measure actual effectiveness, perhaps by repeating the experimental conditions over time, and measuring subjects' attitudes and behaviors on a number of occasions during that time.

A second concern that puts the quality of the findings at jeopardy stems from the extremely small subject pool of female adolescent smokers. Although smoking intervention program professionals identify female adolescent smokers as a high-risk group, particularly resistant to intervention efforts, they are still a relatively small percentage of the adolescent population. This fact makes it difficult to identify and isolate enough subjects, especially during the age of smoking initiation, in order to conduct population sample research that can produce generalizable findings. It is hoped that future research would involve larger populations of female adolescent smokers through broader based studies, perhaps incorporating an entire school district rather than a single school.

The finding that the Smokers Group PSA approached a significantly greater degree of perceived relevance than the Nonsmokers Group PSA for

female adolescent smokers, tentatively supports the position that message relevance is likely to be greater when the message is created by individuals with a similar type and degree of involvement with the issue as the intended audience. However, the results regarding effectiveness did not differ significantly and, considering that the relationship between relevance and effectiveness is one of the central concerns of persuasion research, the potential confounding effect of perceived effectiveness and actual effectiveness is one that needs addressing in future studies. As suggested above, actual effectiveness might be measured more accurately by using behavioral measures, especially if done in a longitudinal study with a larger pool of female adolescent smokers, thereby providing a clearer picture of the relationship between perceived relevance and message effectiveness.

Research Question 2

Research Question 2a asked if female adolescents who have experimented with cigarette smoking might perceive more relevance in a "don't smoke" message created by female adolescent smokers than in one created by female adolescent nonsmokers. The results show no significant differences in terms of perceived relevance. It is possible that this failure to produce differences may be explained by the more heterogeneous make-up of such a group. "Females who have tried smoking" may include those who have taken one puff of a friend's cigarette, as well as individuals who "experiment" weekly but do not characterize themselves as smokers. This being the case, it is difficult to make assumptions about the level or quality of experience with cigarette smoking these individuals have had, not to mention how these differences influence their perceptions of

relevance in a persuasive message.

That being said, the results addressing Research Question 2b present a quandary. The members of this group, female adolescents who have tried smoking, perceived the Smokers Group PSA to be significantly more effective than the Nonsmokers Group PSA. One reason that may explain why this occurred is that, while the members of this group did not personally perceive one PSA as more relevant than the other, they simply believed, perhaps from their association with cigarette smokers, that the Smokers Group PSA message would be more effective with those who are more at-risk for becoming cigarette smokers. In other words, although the experimenters did not find the Smokers Group PSA more personally relevant, from their experience with cigarette smoking they believed that they could predict greater effectiveness for that PSA.

Characteristics of the PSAs

Distinctions exist between the PSAs created by the two groups that deserve some discussion. While these distinctions may be difficult to quantify, this researcher's subjective observations are meant to raise issues for further research rather than to pose them as findings.

Although members of both groups expressed the desire not to tell potential smokers what to do, the resulting tone of each PSA is worth noting. The Smokers Group members chose to express their own qualms about being smokers in a discussion setting, whereas the members of the Nonsmokers Group chose to make a more assertive statement, however subtly couched in a series of rhetorical questions, suggesting hypocrisy in smokers who claim to be concerned about pollution. This difference illustrates both an awareness the smokers have

of the situation in which they find themselves, and an empathy for smokers that may be difficult for nonsmokers to possess. The Smokers Group presented themselves as victims, albeit by their own hands, while the Nonsmokers Group represented smokers as witting perpetrators of contrary behavior. The Smokers Group PSA seemed to invite the audience to learn from the smokers' mistakes, while the Nonsmokers Group PSA had a lesson to teach. These differences infuse each group's bias and agenda into the nonverbal elements of the messages, read between the lines by the intended audience. These messages tell the viewers things about the source of the message and the intentions of the messenger that may make the difference in how the viewers evaluate the content, as well as the relevance, of the message.

Although the stated purpose of this study was to explore ways to increase the relevance of messages, an integral objective was to recognize and affirm the value of contributions that can be made by those who are usually on the receiving end of pedagogy, whether they be cigarette smokers or high school students. The researcher believes that this objective was met, and that the study was, thereby, enriched.

The discussions held with the adolescent participants were eye opening, providing the researcher with an opportunity to improve his own intergenerational communication skills. Each resulting PSA was original and carried a strong sense of its adolescent producers, a feeling that could not have been created by any adult. Perhaps this study will encourage researchers to venture out beyond the college classroom, and public school administrators and teachers to welcome such research into their environment. It is hoped also that

this study will help persuade educators to think of some of their "problem students" as potential problem solvers.

Conclusion and Recommendations

Communication researchers need to distinguish between issue relevance and message relevance. Too much is assumed about the transfer of perceived relevance from issue importance to message relevance. The messages themselves need to be considered to determine if they hold relevance for the receiver as they are being received. It has been argued and supported by the research that issue relevance influences the way individuals process messages. More research needs to explore how the perceived relevance of the content of the message itself impacts on the way individuals process that message.

In addition, future research into message relevance and persuasive communication should focus more on intimate issues; issues that directly impact individuals in personally consequential ways, and require the individuals to make choices that will affect those consequences. Smoking is such an issue, as are other substance abuse issues. But other issues such as prejudice, vandalism, violence; these too may be thought of as behaviors that are harmful to the individual, the family, and the society. These too may have been chosen by individuals as useful and acceptable behaviors at some point before the behaviors became addictive. Like cigarette smokers, these individuals will ignore or reject messages that do not address their concerns and interests; messages that do not acknowledge their perceived utility of the behavior; messages that are not relevant. As with the members of the Smokers Group, people who currently participate in harmful, risk-taking behavior are the very ones who may offer the

most relevant messages for those who are at-risk for experimenting or adopting the same behavior.

Future research should continue to explore the construction and impact of personally relevant persuasive messages, especially those concerning socially important and intimate issues. Such research would benefit most from dialogue with members of the population these messages hope to influence. In the end, the contribution made by this line of research might be nothing less than helping people choose attitudes and behaviors that enhance, rather than endanger, their lives and their world.

REFERENCES

Amos, A., & Chollat-Tarquet, C. (1990, April-May). Women and tobacco. World Health, pp. 7-8.

Atkin, C. K., & Freimuth, V. (1989). Formative evaluation research in campaign design. In R. E. Rice & C. K. Atkin (Eds.), Public communication campaigns (2nd ed., pp. 131-150). Newbury Park, CA: Sage.

Baker, S. & Sherman, C. (1991, June). Saving your lungs and your life. Health, pp. 63-69.

Berscheid, E. (1966). Opinion change and communicator-communicatee similarity and dissimilarity. Journal of Personality and Social Psychology, 4, 670-680.

Brock, T. C. (1965). Communicator-recipient similarity and decision change. Journal of Personality and Social Psychology, 1, 650-654.

Burnkrant, R. E., & Unnava, H. R. (1989). Self-referencing: A strategy for increasing processing of message content. Personality and Social Psychology Bulletin, 15, 628-638.

Fackelmann, K. A. (1991, April 6). Virus-smoking synergy causes malignancy. Science News, p. 215.

Federal survey counts female smokers. (1991, November 9). Science News, p. 302.

Gilchrist, L. D., Schinke, S. P., & Nurius, P. (1989). Reducing onset of habitual smoking among women. Preventive Medicine, 18, 235-248.

Glynn, T. J. (1989). Essential elements of school-based smoking prevention programs. Journal of School Health, 59, 181-188.

Haas, R. G. (1981). Effects of source characteristics on cognitive responses and persuasion. In R. E. Petty, T. M. Ostrom, & T. C. Brock (Eds.), Cognitive responses in persuasion (pp. 141-172). Hillsdale, NJ: Lawrence Erlbaum.

Harris, J. (1984). Lung cancer among women. Journal of the American Medical Association, 252, 2806-2811.

Homer, P. M. & Kahle, L. R. (1990). Source expertise, time of source identification, and involvement in persuasion: An elaborative processing perspective. Journal of Advertising, 19, 30-39.

Kardes, F. R. (1988). Spontaneous inference processes in advertising: The effects of conclusion omission and involvement on persuasion. Journal of Consumer Research, 15, 225-233.

Leippe, M. R., & Elkin, R. A. (1987). When motives clash: Issue involvement and response involvement as determinants of persuasion. Journal of Personality and Social Psychology, 52, 269-278.

McGuire, W. J. (1969). The nature of attitudes and attitude change. In G. Lindzey & E. Aronson (Eds.), The handbook of social psychology (2nd ed., Vol. 3). The individual in a social context (pp. 136-314). Reading, MA: Addison-Wesley.

Norusis, M. J. (1988). SPSS: Data Entry II. Chicago: SPSS.

Norusis, M. J. (1988). SPSS/PC+ V2.0 Base Manual. Chicago: SPSS.

Ostrom, T. M. & Brock, T. C. (1968). A cognitive model of attitudinal involvement. In R. Abelson, E. Aronson, W. McGuire, T. Newcomb, M. Rosenberg, & P. Tannenbaum (Eds.), Theories of cognitive consistency: A sourcebook (pp. 373-383). Chicago: Rand McNally.

Petty, R. E., & Cacioppo, J. T. (1979) Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. Journal of Personality and Social Psychology, 37, 1915-1926.

Petty, R. E., & Cacioppo, J. T. (1984). The effects of involvement on responses to argument quantity and quality: Central and peripheral routes to persuasion. Journal of Personality and Social Psychology, 46, 69-81.

Petty, R. E., & Cacioppo, J. T. (1986). Communication and persuasion: Central and peripheral routes to attitude change. New York: Springer-Verlag.

Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. Journal of Consumer Research, 10, 135-146.

Sereno, K. K. (1968). Ego-involvement, high source credibility, and response to a belief-discrepant communication. Speech Monographs, 35, 476-481.

Sherif, C. W., Kelly, M., Rodgers, H. L., Jr., Sarup, G., & Tittler, B. I. (1973). Personal involvement, social judgment, and action. Journal of Personality and Social Psychology, 27, 311-328.

Sherif, M., & Hovland, C. I. (1961). Social judgment: Assimilation and contrast effects in communication and attitude change. New Haven, CT: Yale University Press.

Smoking boosts risk of tubal pregnancy. (1991, March 16). Science News, p. 175.

Snyder, M., & DeBono, K. G. (1985). Appeals to image and claims about quality: Understanding the psychology of advertising. Journal of Personality and Social Psychology, 49, 586-697.

Sorrentino, R. M., Bobocel, D. R., Gitta, M. Z., Olson, J. M., & Hewitt, E. C. (1988). Uncertainty orientation and persuasion: Individual differences in the effects of personal relevance on social judgments. Journal of Personality and Social Psychology, 55, 357-371.

Stolley, P. D. (1983). Lung cancer in women: Five years later, situation worse. New England Journal of Medicine, 309, 428-429.

Tobacco use among high school students - United States, 1990. (1991). Journal of the American Medical Association, 266, 206-207.

U.S. Department of Health and Human Services. (1989). Reducing the health consequences of smoking: 25 years of progress: A report of the Surgeon General. Publication No. CDC 89-8411. Washington, DC: U.S. Government Printing Office.

U.S. Public Health Service. (1980). The Health Consequences of Smoking for Women: A Report of the Surgeon General. Publication No. 0-326-003, 286 Washington, DC: U.S. Government Printing Office.